



by :

U.S. Geological Survey

OPEN FILE MAP 83-80 (E-8)

Photointerpretation and field check 1980.
This map has not been edited or reviewed
for conformity with Geological Survey
standards and nomenclature.

MAN-MADE FEATURES	
Strip mines (combination of letter symbols indicates complex formed or more than one type of strip mine)	
sh	bench with high wall
sf	furrowed with high wall
sd	multiple furrows and multiple benches
ss	hilltop removed
srg	reclaimed by grading
sru	reclaimed by secondary use
shr	regraded in part, high wall remains
Coal refuse banks	
r	identified on aerial photographs; not classified in field check
rb	not burnt nor on fire
rbb	burnt
rbd	burning
rbs	sludge
Quarries	
q	quarry site
Gravel pits	
g	site of gravel pit
Slides in man-made features	
af	earth flow in fill
as	earth flow in strip castings
ar	earth flow in coal refuse

COLLUVIAL SLOPE
Valley wall along major streams with slope as steep as 40° (85%), stony, clayey silt soil up to 50 ft. (15 m) thick; commonly buttressed by a terrace or bench at the toe of the slope; very susceptible to sliding by cutting of toe area, removal of terrace or bench, and overloading, slide commonly activated without apparent cause.

AREAS SUSCEPTIBLE TO ROCKFALL
Steep, locally vertical, natural and man-made slopes and cliffs, 15 ft. (4.5 m) or more high, formed dominantly of sandstone, limestone, sandy shale, mudstone and claystone. Interbedded mudstone, claystone and shale weather rapidly leaving sandstone and limestone rock faces unsupported.

SOIL AND ROCK SUSCEPTIBLE TO LANDSLIDING
Soil and rock similar to that involved in landslides elsewhere in map area; primarily areas underlain by claystone, mudstone and shale associated with other rock types. Rock weathers rapidly on exposure forming clayey soil highly susceptible to sliding. Includes coves (U-shaped, shallow valleys) containing thick layers of clayey soil that are very susceptible to sliding where excavation breaks continuity of slope and where overloaded by artificial fill.

AREAS LEAST PRONE TO LANDSLIDES
Map areas in which no patterns or symbols are shown;
primarily valley floors, ridge tops and broad
benches; modification by excavation and fill may
lead to local landslides.

The first **four** digits of the open file number designate the specific 1:250,000 scale map sheet of which this quadrangle is a part. The last two digits designate the position of the quadrangle in a subdivision of the 1:250,000 scale map based on rows and tiers shown in the diagram to the right. The location of this quadrangle is shown by the black square.

